

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Application

Applicant(s): A.D. Baker et al.
Case: 19-3
Serial No.: 09/484,098
Filing Date: January 18, 2000
Group: 2157
Examiner: Gregory G. Todd

Title: Methods and Apparatus for Local Network
Address Acquisition, Analysis and Substitution

REPLY BRIEF

Commissioner for Patents
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Sir:

The remarks which follow are submitted in response to the Examiner's Answer dated October 31, 2007 in the above-identified application. The arguments presented by Appellants in the corresponding Appeal Brief dated June 28, 2007 are hereby incorporated by reference herein. Appellants note that the Examiner has withdrawn the §101 and §112 rejections. Accordingly, there are two remaining grounds of rejection to be reviewed on Appeal. In the Answer at pages 7-9, the Examiner responds to various arguments raised by Appellants in the June 28, 2007 Appeal Brief with regard to these two remaining grounds of rejection. Appellants will address below these arguments presented by the Examiner.

With regard to the §102(e) rejection of independent claim 1 over U.S. Patent No. 6,088,725 (hereinafter "Kondo"), the Examiner argues that the address mapping server (AMS) 102 as shown in FIG. 1 of Kondo meets the recited gateway coupled between a local network and one or more external network elements. Appellants respectfully disagree. Appellants in their June 28, 2007 Appeal Brief pointed out that Kondo expressly states that the AMS 102 is an element attached to a

local network 105a and further that it is the local network 105a that is interfaced to Internet 106 via router 103. See Kondo at column 4, lines 58-65, and column 5, lines 7-11. Thus, the AMS 102 cannot reasonably be said to be coupled between the local network and the router 103, as is argued by the Examiner in the Answer at page 7, second paragraph. It is important to note that Appellants are not arguing that the router 103 is an element of the LAN 105a. To the contrary, viewing router 103 as an element of an external network relative to LAN 105a, it is entirely clear from FIG. 1 itself and from the above-cited portions of Kondo that the AMS 102 is not coupled between the LAN 105a and the router 103. The AMS 102 in FIG. 1 of Kondo is clearly shown and described as being a device attached to the LAN 105a, and not a device coupled between the LAN 105a and the router 103.

The Examiner further argues that the term “coupled between” as used in claim 1 and the specification somehow deviates from its standard meaning so as to be met by the arrangement of AMS 102 in FIG. 1 of Kondo. However, as Appellants noted at page 3, first full paragraph, of the June 28, 2007 Appeal Brief, an illustrative embodiment of the arrangement recited in claim 1 is shown in FIG. 1 of the present application, where gateway 110 is clearly shown as being coupled between a LAN 102 and external networks 114 and 116. It is readily apparent from a comparison of FIG. 1 of the present application with FIG. 1 of Kondo that in the former, gateway 110 is coupled between LAN 102 and elements of external networks 114 and 116, while in the latter, AMS 102 of Kondo is not coupled between LAN 105a and any external network element. The Examiner points to passages in the present specification at page 2, lines 19-20, and page 7, lines 19-21, as allegedly supporting an interpretation of claim 1 that does not actually require the recited gateway to be coupled between the local network and one or more external network elements. However, the Examiner is taking these passages out of context. The passages in question clearly refer to communications between devices, and not to the coupling of certain physical elements between other physical elements. Accordingly, these passages have no bearing on the proper interpretation of the term “coupled between” as used in claim 1. The passages clearly fail to support the Examiner’s argument to the effect that an explicit claim 1 recitation of the form “A coupled between B and C” does not actually require A to be coupled between B and C.

Appellants wish to further point out that claim 1 specifies that the gateway is operative to establish a substitution address. It is believed that the AMS 102 in Kondo does not establish a substitution address as recited. To the contrary, as will be discussed in greater detail below, the AMS 102 stores a mapping between an old or home address for a given PC 101 and a new or present address for that PC 101. See Kondo at, for example, the abstract and column 4, line 65, to column 5, line 7. Neither of these two addresses is established by the AMS 102, but instead both are apparently assigned using a conventional protocol such as DHCP. See Kondo at, for example, column 1, lines 56-60.

With regard to the §102(e) rejection of claims 6, 7, 16 and 17, it is believed that the AMS 102 in Kondo fails to teach or suggest a gateway that stores address substitution information of the particular type recited. The operation of the AMS 102 is described generally in Kondo at column 4, line 65, to column 5, line 7, as follows:

The AMS 102 has a function of managing correspondence relations between (a) an Internet protocol address (IP address) which has been first and uniquely assigned to each PC and is an address (hereinafter, referred to as a “home address”) used generally in the embodiments of the present invention, and (b) an address (hereinafter, referred to as a “present address”) which is an IP address decided and assigned depending on a connection location on a network and is changed when a connection location on a network is changed.

Thus, it is the function of the AMS 102 to simply store a mapping between an initially-assigned IP address for a given PC 101 and a new IP address that is assigned when the PC 101 is moved, that is, upon the changing of a connection location of that PC 101. The AMS 102 therefore does not store address substitution information for a given device that comprises an address to be used by the given device in communicating with the gateway, and addresses to be used by the given device in communicating with each of a plurality of other devices. To the contrary, the AMS 102 simply stores the old or home address for a given PC in association with its corresponding new or present address, so that other PCs can contact the AMS 102 and provide it with the old address of the given PC in order to obtain the new address of the given PC. See the processing shown in FIG. 5

of Kondo, and described at column 8, lines 1-13, and column 9, line 14, to column 10, line 35. The operation of AMS 102 therefore fails to meet the limitations of claims 6, 7, 16 and 17.

With regard to the §102(e) rejection of claims 8 and 18, the Examiner continues to rely on the teachings in column 5, lines 15-33, of Kondo. However, as noted above, the operation of the AMS 102 in providing conversion between an old or home address of a given PC 101 and a new or present address of the given PC 101 does not prevent communications between different PCs 101 on the same LAN 105 from being routed through an external network element. To the contrary, it is entirely possible that the new or present address remotely assigned to a given PC 101 that moves from LAN 105a to LAN 105b will be such that communications between that PC 101 and other PCs 101 on the LAN 105b will necessarily be routed through an external network element. For example, the new or present address stored by the AMS 102 may be one that requires a communication between the given PC 101 and another PC 101 on the LAN 105b to traverse the external network 106. The AMS 102 therefore fails to provide address substitution information of the type recited in claims 8 and 18, and fails to provide the associated advantages in terms of reducing unnecessary data traffic through an external network. See the specification at, for example, page 2, lines 21-22.

With regard to the §102(e) rejection of claims 10 and 20, it is believed that the AMS 102 fails to operate in the particular manner recited. As described in Kondo, the AMS 102 receives and responds to address inquiry messages from PCs 101. See Kondo at page 10, lines 26-34. In a given such message, one PC 101 sends the AMS 102 the old or home address of another PC 101 that has moved, and the AMS 102 responds with the new or present address of the other PC 101. Such operations fail to anticipate the recited gateway which intercepts at least one of control information and maintenance information associated with a given device so as to perform related services on behalf of that device.

With regard to the §103(a) rejection of claims 4 and 14, the Examiner argues that it would be obvious to incorporate an ATU-R device into the AMS 102 of Kondo. However, as Appellants have noted above, the AMS 102 is not coupled between a local network and one or more elements of an external network. Accordingly, it is believed that one skilled in the art would not be motivated to configure the AMS 102 to comprise an ATU-R device. Use of such an ATU-R device allows the

gateway to provide an interface between a local network and one or more external networks via a digital subscriber loop (DSL) access multiplexer. See the specification at, for example, FIG. 1 and page 3, line 24, to page 4, line 2. As the AMS 102 in Kondo does not provide such an interfacing function for a local network, there would be no motivation to configure it to comprise an ATU-R as recited. Appellants respectfully submit that the statements proffered by the Examiner at page 9, first paragraph, of the Answer fail to provide sufficient objective motivation for the proposed combination and, rather, are conclusory statements of the sort rejected by both the Federal Circuit and the U.S. Supreme Court. See KSR v. Teleflex, 127 S. Ct. 1727, 1741 (2007), quoting In re Kahn, 441 F. 3d 977, 988 (Fed. Cir. 2006) (“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.”).

For the reasons identified above and in their June 28, 2007 Appeal Brief, Appellants respectfully submit that claims 1-21 are allowable over the prior art of record.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Joseph B. Ryan", with a long horizontal flourish extending to the right.

Date: December 31, 2007

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